## **CLAIMS**

## WHAT IS CLAIMED:

A processor-based system, comprising:

a first board; and

a second board having a connector, wherein the connector is adapted to

parallelly couple the first board to the second board.

The processor-based system of claim 1, wherein the connector is a male

connector.

The processor-based system of claim 2, wherein the connector comprises a power module to receive an electrical signal and to provide the electrical signal to the first board.

- 4. The processor-based system of claim 1, wherein the connector comprises one or more guide modules for aligning the connector with the second board.
- 5. The processor-based system of claim 1, wherein the connector comprises a 20 first support member and a second support member with one or more contact modules disposed therein.



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The processor-based system of claim 1, wherein the first board is at least one 6. of an I/O board and a system board, and wherein the second board is an expander board.

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The processor-based system of claim 1, wherein connector is adapted to planarly couple the first board to the second board.

9. The processor-based system of claim 1, wherein the first board comprises a female connector to interface with the connector of the second board.

10. An apparatus, comprising:

a first board;

an expander board; and

a connector having a first end adapted to be coupled to the first board and a second end adapted to be coupled to the expander board, wherein the first board and the expander board are coupled substantially in parallel.

- 11. The apparatus of claim 10, wherein the expander couples the first board to a switch.
- 12. The apparatus of claim 11, wherein the connector comprises a <u>power module</u> for receiving a power signal from the switch and providing the power signal to one or more components of the first board.

13.

A connector, comprising:

a first and a second supporting member;

? Not tied in with anything

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Page 17 of 21

a first set of electrical connectors adapted to couple to a first board;

a second set of electrical connectors disposed between the first and second

\_supporting members, wherein the second set of electrical connectors

are oriented substantially perpendicular to the first set of electrical

\_connectors and wherein the second set of electrical connectors are

adapted to couple to a second board that is substantially parallel to the

first board.

14. The connector of claim 13, further comprising a power module for receiving and delivering power signals

15. The connector of claim 13, further comprising at least one guide module for aligning the first board to the second board.

16. The connector of claim 13, further comprising a wafer having the first and second sets of electrical connectors.

17. The connector of claim 16, further comprising one or more of the wafers.

 $20 \le 10^{18}$ 

A method, comprising:

coupling a connector to a first printed circuit board;

coupling a second printed circuit board to the first printed circuit board using the connector, wherein the coupled first and second printed circuit boards are substantially parallel to each other.

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19. The method of claim 18, the connector including a first set and second set of electrical connectors positioned substantially perpendicular to each other, wherein coupling the connector to the first printed circuit board comprises coupling the first set of electrical connectors to the first printed circuit board.

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- 20. The method of claim 19, wherein coupling the first set of electrical connectors to the first printed circuit board comprises inserting the first set of electrical connectors through one or more openings in the first printed circuit board and expanding the first set of electrical connectors in the openings.
  - 21. The method of claim 19, wherein coupling the second printed circuit board to the first printed circuit board comprises coupling the second set of electrical connectors to the second printed circuit board.
  - The method of claim 19, the second printed circuit board including a second connector having one or more receptacles, wherein coupling the second set of electrical connectors to the second printed circuit board comprises inserting the second set of electrical connectors in the one or more receptacles of the second connector.

23. A method comprising:

providing a first board of a processor-based system to a first end of a connector;

providing a second board of the processor-based system to an opposite end of the connector, wherein the first and second board, when coupled by the connector, are substantially parallel to each other.

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24. The method of claim 23, wherein providing the first board comprises

providing the providing the first board of the processor-based system to the first end of a right

angle connector.

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25. The method of claim 24, wherein the first board comprises a female connector, wherein providing the first board comprises coupling the female connector to the right angle

connector.